Amendments to the Specification

Please replace the paragraph beginning on page 14, line 26, with the following rewritten paragraph.

In any case, the magnetic field generated from one magnetic layer may affect the magnetic direction of adjacent layers. As such, in order to prevent the magnetic field of pinned portion 28 from influencing the magnetic direction of the free layer in storing portion 26, the overall magnetic spin within pinned portion 28 should be substantially zero. Such an overall magnetic spin may be achieved by counteracting the magnetic field generated from magnetic layer 56. More specifically, pinned portion 28 may be fabricated with an additional magnetic layer having a magnetic direction set in a substantially opposite direction than magnetic layer 56. As such, pinned portion 28 may further include coupling layer 58 and magnetic layer 60 formed above magnetic layer 56, as shown in Fig. 2. In particular, pinned portion 28 may also include coupling layer 58 interposed between magnetic layer 60 and magnetic layer 56. In yet other embodiments, pinned portion 28 may be absent of an additional magnetic layer and a coupling layer. As such, although the embodiments provided herein include coupling layer 58 and magnetic layer 60, the method described herein is not restricted to the inclusion of such layers.

Please replace the paragraph beginning on page 24, line 20, with the following rewritten paragraph.

Fig. 7b illustrates a magnified view of portion 70 of microelectronic topography 20 subsequent to the etch process described in reference to Fig. 7a. In particular, Fig. 7b illustrates a magnified view of the patterned sidewalls of masking layer 64 and magnetic layer 62. As shown in Fig. 7b, veil 80 may be formed along the patterned sidewalls of magnetic layer 62 and masking layer 64 as a result of the etching process described in reference to Fig. 7a. In particular, the etching process described in reference to Fig. 7a may include redepositing byproducts formed during the etch process along the sidewalls of the patterned structure. Such byproducts may be referred to herein as "veils." In general, veils may include compounds from the one or more layers removed during the etch process and/or the one or more elements used in the etch chemistry used for the etch process. Typically, the thicknesses of veils are on the order of a few angstroms to tens of angstroms and, therefore, veil 80 is not depicted in Fig. 8a7a.

Please replace the paragraph beginning on page 26, line 24, with the following rewritten paragraph.

Fig. 8b illustrates a magnified view of portion 70 of microelectronic topography 20 subsequent to the implantation of dopants 76 as described in reference to Fig. 8a. As shown in Fig. 8b, doped portion 78 may include an upper portion of magnetic layer 62 as well as veil 80. As described above, the introduction of dopants used to form doped portion 78 may be adapted to alter the etching characteristics of veil 80 such that it may be subsequently removed during a successive etch step described in reference to Fig. 9a. The introduction of dopants into magnetic layer 62 may form a material which may be removed from the subsequent etch process as well. In some embodiments, the subsequent etch process may be adapted to remove the entirety of doped portion 78 as well as a portion of the underlying layers. As such, Fig. 9a illustrates the removal of doped portion 78 as well as remaining portions of magnetic layer 62 and a portion of tunneling barrier layer 27. Such an etch process may alternatively etch more or less of microelectronic topography 20, depending on the design characteristics of the magnetic cell junction ~~pattering~~ patterning process. For example, in some embodiments, the etch process may ~~be to~~ primarily remove the doped portion of magnetic layer 62 and underlying layers such that a substantial portion of the doped portion of veil 80 (i.e., the portion of doped portion 78 along the sidewalls of the patterned structure) may remain and serve as an insulating dielectric for the patterned structure.